



briefing notes – road safety issues

Eastern Bay of Plenty

Land Transport New Zealand has prepared this road safety issues report, it is based on reported crash data and trends for the 2002–2006 period. The intent of the report is to highlight the key road safety issues and be a resource to identify possible ways to reduce the number of road deaths and injuries in the Eastern Bay of Plenty.

This report is the eighth road safety report for the Eastern Bay of Plenty. The data in this report applies to local roads and State Highways in the Eastern Bay of Plenty.

In each new report one year's data is added to a five year block and the oldest dropped so it is unlikely that the core issues for any local body would change radically from report to report.

The issues chosen for this report are drawn from either the most common crash types, those that appear over-represented when the Eastern Bay of Plenty is compared to similar local bodies or those with high social cost (high numbers of fatal and serious crashes mainly).

We have included a brief overview of crashes in the district for 2006.

We encourage local authorities to use the Ministry of Transport's Crash Analysis System (CAS) to further investigate the highlighted issues.

Major Road Safety Issues

Eastern Bay of Plenty

Intersections
Alcohol
Speed
Bends – loss of control

Nationally

Speed
Alcohol
Failure to give way
Restraints

2006 road trauma

Casualties

Deaths	10
Serious casualties	38
Minor casualties	125

Crashes

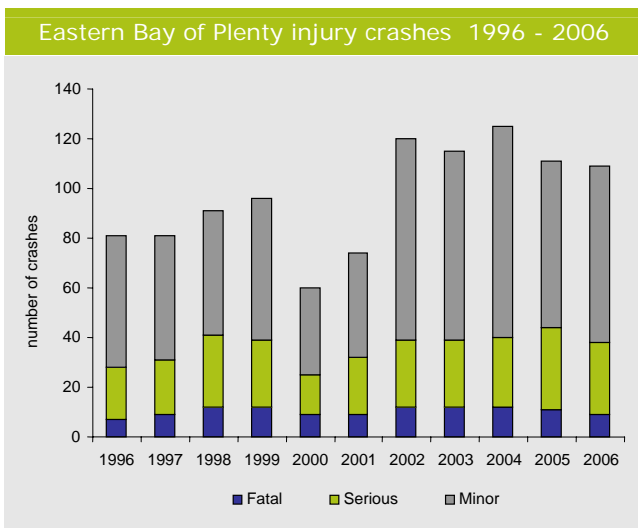
Fatal crashes	9
Serious injury crashes	29
Minor injury crashes	71
Non-injury crashes	182

Overview of 2006

In 2006 on local roads in Eastern Bay of Plenty there were 62 injury crashes and 117 non-injury crashes, in addition there were 47 injury crashes and 65 non-injury crashes on State Highways, as reported by the New Zealand Police.

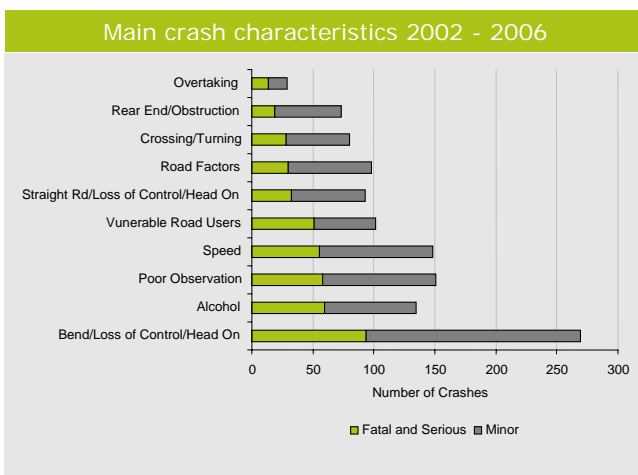
The table below shows the number of injuries resulting from 2006 crashes by rural or urban areas for both local and Transit roads (rural is defined as an area with a speed limit of 80km/h or more).

	Fatalities	Serious injuries	Minor injuries	Total
Rural	7	25	88	120
Urban	3	13	37	53
Total	10	38	125	173



Fatalities in the district have been falling over the last 3 years.

Serious injuries on the other hand have remained steady over the last 5 years.



Further information about 2006 injury and non-injury crashes on local roads:

- Worst month December (27), best May (7)
- Worst day Saturday (39), best Monday (14)
- Wet road 20 percent
- Night time 34 percent
- Midblock 72 percent
- 69 percent of at fault drivers are male (injury crashes)
- 55 percent of at fault drivers in injury crashes have a full NZ licence

Further information about 2006 injury and non injury crashes on Transit roads

- Worst month June (15), best September (5)
- Worst day Wednesday (19), best Sunday (8)
- Wet road 25 percent
- Night time 32 percent
- Midblock 73 percent
- 66 percent of at fault drivers are male (injury crashes)
- 64 percent of at fault drivers in injury crashes have a full NZ licence

It has been observed nationally that there is a growing group of drivers who have not been exiting the graduated licence system and who are choosing to stay on restricted licences. This is making it increasingly difficult to distinguish drivers who are truly inexperienced from those that should have moved to a full licence. As a consequence it is more difficult to target educational material.

This is certainly true in Eastern Bay of Plenty with only 54 percent of at fault drivers in injury crashes being the holder of a full driving licence.

Driver licence status (injury crashes, at fault drivers Eastern Bay of Plenty roads)	Percentage of total at fault drivers (NZ value in brackets)
Full	54.1 (58.4) %
Learner	10.7 (9.5) %
Restricted	14.1 (17.6) %
Never Licenced	5.3 (2.2) %
Disqualified	3.2 (1.7) %
Overseas	1.9 (4.2) %
Expired	1.7 (0.5) %
Other / unknown	9.0 (5.6) %

Speed

Nationally, speed is one of the major contributing factors to road crashes. For the 12 months to the end of December 2006, excessive speed contributed to around 31 percent of fatal crashes and 16 percent of injury crashes.

During 2006, there were 1,839 injury crashes where the driver was travelling too fast for conditions.

Reducing speeds to appropriate levels is an important road safety goal. Excessive speed increases the likelihood of a crash occurring by reducing the time available for drivers to respond to hazardous situations and it also leads to more serious injuries. Research has shown that a one km/h reduction in mean speeds can produce up to a three percent reduction in injury crashes.

In the Eastern Bay of Plenty, excessive speed was a factor in 29 percent of injury crashes in 2006.

Speed related injury crashes	2002	2003	2004	2005	2006
Urban	6	4	12	7	8
Rural	16	24	28	19	24
Total	22	28	40	26	32

There were 148 speed-related injury crashes reported in the last five years.

Males are also highly represented as at fault drivers in speed related crashes, accounting for 78 percent of drivers

Drivers at fault or part fault in speed related injury crashes (2002-2006) *	Male	Female	Total
15- 19 years	35	8	43
20 - 24	16	6	22
25 - 29	10	2	12
30 - 39	26	5	31
40 - 49	10	8	18
50 - 59	5	0	5
60 - 69	4	0	4
70+	2	2	4
Total	108	31	139

* (note ranges are not equal)

The following table illustrates the licence status of at fault drivers in speed related crashes in Eastern Bay of Plenty and all New Zealand (2006).

Driver licence status, speed related injury crashes, at fault drivers in Eastern Bay of Plenty	Percentage of total at fault drivers in speed related crashes (NZ value in brackets)
Full	52.9 (43.0) percent
Learner	11.8 (15.3) percent
Restricted	17.6 (22.5) percent
Never Licenced	8.8 (4.5) percent
Disqualified	0 (4.1) percent
Overseas	2.9 (3.7) percent
Expired	0 (0.5) percent
Other / unknown	5.9 (6.2) percent

Further facts about speed related crashes in Eastern Bay of Plenty (divided into local roads and Transit roads) (2002 -2006)

Local roads

- 8 deaths, 28 serious injuries, 103 minor injuries
- Male drivers 78 percent
- Most common crash type Bend – (loss of control/head on)
- 80 percent at midblock
- 25 percent wet road
- 48 percent night time
- Worst month December, best May
- Worst day of week Saturday, best Tuesday

Transit roads

- 17 deaths, 24 serious injuries, 68 minor injuries
- Male 77 percent
- Most common crash type Bend – (loss of control/head on)
- 19 percent at intersections
- 37 percent wet road
- 44 percent night time
- Worst month May, best December
- Worst day Friday, best Thursday

Intersections

Crashes at intersections are the most common type in urban areas of Eastern Bay of Plenty.

During the five year period 2002 to 2006 there were 135 injury crashes at intersections and 262 non-injury crashes. In these 2 people died, 38 received serious injuries and 169 received minor injuries.

Intersection crashes	2002	2003	2004	2005	2006
Injury crash	23	27	32	26	27
Non-injury crash	49	55	50	54	54
Total	72	82	82	80	81

The table below shows the locations of the five intersections with the highest number of crashes in Eastern Bay of Plenty between 2002 and 2006.

Intersection name	Total crashes 2002 - 2006	Injury crashes 2002 - 2006	Total crashes in 2006
SH 30 / Paroa Road	10	-	4
Valley Road / Goulstone Road	9	2	0
Peace Street/ McGarvey Road	7	2	0
Commerce Street / Domain Road	7	0	4
SH 2 / SH 30	7	3	1

Crashes at Tee type junctions in urban areas are the most common type of intersection crash reported, followed by crashes at Tee type rural junctions.

Junction type	Rural	Urban
Roundabout	3	52
Tee	100	145
Cross (X)	19	47
Y	3	7
Other (includes driveways)	3	16

The main causes contributing to crashes described in Police reports were:

- Not checking properly
- Failure to stop and give way
- Too fast

Intersections present most drivers with one of their biggest driving challenges and as a result less experienced drivers are highly represented in these crashes as illustrated in the table below showing licence class of at fault drivers.

Driver licence status, intersection related injury crashes, at fault drivers in the Eastern Bay of Plenty	Percentage of total at fault drivers in intersection related crashes (NZ value in brackets)
Full	57.1 (60.9) %
Learner	12.6 (9.4) %
Restricted	14.3 (14.8) %
Never Licenced	5.0 (2.5) %
Disqualified	2.5 (1.6) %
Overseas	2.5 (3.7) %
Expired	0.8 (0.8) %
Other / unknown	5.0 (6.3) %

Further facts about intersection related crashes in Eastern Bay of Plenty 2002 to 2006 (divided into local roads and Transit roads):

Local roads

- 0 deaths, 21 serious injuries, 85 minor injuries
- 66 percent of at fault drivers are male
- Most common crash type, crossing/turning
- 11 percent alcohol over limit
- 74 percent urban
- 14 percent wet roads
- 28 percent night time
- Worst month January, best April
- Worst day of week Thursday, best Wednesday

Transit roads

- 2 deaths, 17 serious injuries, 84 minor injuries
- 80 percent of at fault drivers are male
- Most common crash type, crossing/turning
- 7 percent alcohol over limit
- 35 percent urban
- 17 percent wet roads
- 29 percent night time
- Worst month May, best July
- Worst day of week Thursday, best Monday

Drink-driving

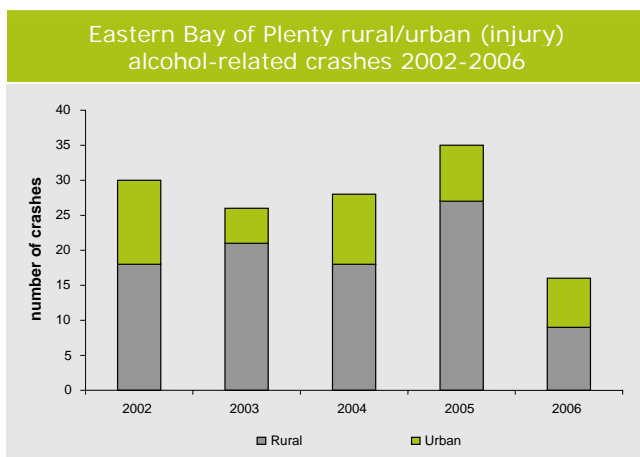
Alcohol affects the way people drive. Studies show that the risk of being involved in a crash increases rapidly as a driver's blood alcohol level rises. A driver over the legal limit (80mg of alcohol per 100ml of blood) is three times more likely to be involved in a crash than a sober driver.

Contrary to popular opinion, people with high blood alcohol levels are more likely to be injured or killed in a crash than sober drivers in the same crash and if injured, they are also more likely to encounter complications in their recovery.

In New Zealand for the 12 months to December 2006, alcohol-affected drivers contributed to 31 percent of all fatal crashes and 15 percent of all injury crashes.

In the Eastern Bay of Plenty alcohol was a factor in 15 percent of injury crashes in 2006, a decrease from 2005, and decreasing against the national trend.

There were 135 alcohol-related injury crashes reported in the last five years.



Key locations

The following provides a breakdown of the key locations in Eastern Bay of Plenty at which drink-driving crashes occurred during the 2002 to 2006 period.

Eastern Bay of Plenty
SH 2 / Otara Road intersection
Ohope Road, 150m west of Burma Road
SH 2 / Forsyth Street intersection
SH 2 / 1000m north of Glenholme Road
Reid Road, 700m north of Awahou Road

The following table illustrates the licence status of at fault drivers in alcohol related crashes in Eastern Bay of Plenty and all New Zealand (2006).

Driver licence status, alcohol related injury crashes, at fault drivers in the Eastern Bay of Plenty	Percentage of total at fault drivers in alcohol related crashes (NZ value in brackets)
Full	40.0 (41.6) percent
Learner	13.3 (15.8) percent
Restricted	20.0 (20.8) percent
Never Licenced	13.3 (4.6) percent
Disqualified	13.20 (6.2) percent
Overseas	0 (1.0) percent
Expired	0 (1.4) percent
Other / unknown	13.3 (8.2) percent

Further facts about alcohol related crashes in Eastern Bay of Plenty (divided into local roads and Transit roads) (2002 -2006)

Local roads

- 9 deaths, 36 serious injuries, 74 minor injuries
- Male driver 79 percent
- Most common crash type, Bend – (loss of control/head on)
- 20 percent at intersections
- 40 percent urban
- 24 percent wet road
- 69 percent night time
- Worst month April, best March
- Worst day of week Saturday, best Tuesday

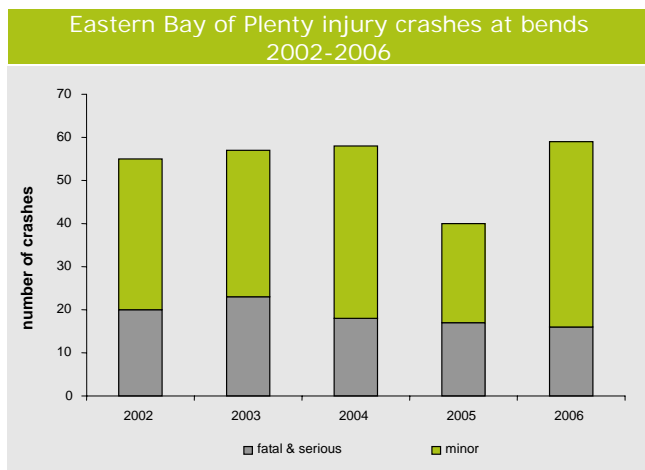
Transit roads

- 14 deaths, 27 serious injuries, 52 minor injuries
- Male drivers 81 percent
- Most common crash type, Bend – (loss of control/head on)
- 12 percent at intersections
- 22 percent urban
- 26 percent wet road
- 69 percent night time
- Worst month November, best February
- Worst day of week Sunday, best Monday

Crashes at bends

Between 2002 and 2006, 46 percent of all injury crashes in Eastern Bay of Plenty occurred at bends. These crashes resulted in 38 fatalities, 93 serious injuries and 331 minor injuries.

Crash numbers have remained fairly constant for the past 5 years.



Most crashes at bends involved a driver losing control of their vehicle and either running off the road or colliding with another vehicle.

After drivers lose control their vehicles often crash into roadside hazards such as ditches, banks, poles or trees. Hitting these objects can result in a relatively minor off-road event turning into something far more serious.

The three most common roadside hazards struck in injury crashes in Eastern Bay of Plenty were fences (49), banks (42) and trees (40) from a total of 272 objects struck.

The following table lists the main characteristics of these crashes.

Crash characteristic	Crashes
Single vehicle	78 percent
Alcohol	32 percent
Excessive speed for the conditions	44 percent
Road factors	24 percent
Poor handling	30 percent
Rural road	80 percent
Wet road	32 percent
Night time	43 percent

The following table illustrates the licence status of at fault drivers for crashes occurring at bends in Eastern Bay of Plenty and all New Zealand (2006).

Driver licence status, bend related injury crashes, at fault drivers in the Eastern Bay of Plenty	Percentage of total at fault drivers in bend related crashes (NZ value in brackets)
Full	51.3 (51.1) percent
Learner	12.2 (10.7) percent
Restricted	14.4 (17.9) percent
Never licenced	5.7 (4.1) percent
Disqualified	4.6 (2.8) percent
Overseas	1.9 (5.6) percent
Expired	1.1 (0.9) percent
Other / unknown	8.7 (6.8) percent

Further information about crashes on bends in Eastern Bay of Plenty:

Local roads

- 8 deaths, 44 serious injuries, 177 minor injuries
- Male drivers 72 percent
- Most common crash type, lost control/head on
- Most common age group 15 - 19
- 18 percent alcohol over limit
- Worst month January, best March
- Worst day of week Saturday, best Wednesday

Transit roads

- 30 deaths, 49 serious injuries, 154 minor injuries
- Male drivers 66 percent
- Most common crash type, lost control/head on
- Most common age group 30 - 39
- 14 percent over alcohol limit
- Worst month November, best July
- Worst day of week Friday, best Monday

Road factors

A safe road environment incorporates numerous design principles, appropriate geometric design standards, good delineation under all conditions, adequate surface skid resistance and a roadside free of unforgiving hazards. It should also serve the safety needs of all vehicles and road users.

Road factors that contribute to crashes include those that affect the way a driver reacts to the driving conditions, such as:

- a slippery road surface
- obstructions on the road, such as slips
- limited visibility
- signs, signals and/or road markings being damaged or in poor condition.

Nationally, road factors were a contributing factor in 12 percent of injury crashes in 2006, with slippery road surfaces being the key factor.

In the Eastern Bay of Plenty, road factors were a factor in 19 percent of injury crashes in 2006, an increase from 2005.

There were 122 road factor related injury crashes reported in the last five years.

Road factors were predominantly a rural issue in the Eastern Bay of Plenty in 2006 (rural is defined as an area with a speed limit of 80km/h or more).

Road factor related injury crashes	2002	2003	2004	2005	2006
Urban	13	1	5	4	2
Rural	20	18	30	10	19
Total	33	19	35	14	21

Key locations

The following provides a list of the key locations at which road factor crashes occurred during the 2002 to 2006 period.

Eastern Bay of Plenty
SH 2, 2km south of Waitata Road
SH 30, 150m west of Hydro Road
SH 2 / SH 30 intersection

The following table shows various road factors involved in injury crashes for Eastern Bay of Plenty during the period 2002-2006.

Number of occasions Police reported this factor 2002 to 2006	Local road	Transit road
	Slippery road	21
Road surface in poor condition	19	14
Road obstructed	2	4
Visibility limited	13	10
Signs or signals (needed or faulty)	3	4
Markings (needed or faulty)	1	1
Street lighting	1	-

Further facts about road factor related crashes in Eastern Bay of Plenty (2002 -2006) by local and Transit roads.

Local roads

- 1 death, 17 serious injuries, 63 minor injuries
- Most common crash type, Bend - (loss of control/head on)
- 12 percent at intersections
- 29 percent urban
- 47 percent wet road
- 25 percent night time
- Worst month November, best August
- Worst day of week Saturday, best Tuesday

Transit roads

- 5 deaths, 12 serious injuries, 75 minor injuries
- Most common crash type, Bend - (loss of control/head on)
- 11 percent at intersections
- 13 percent urban
- 47 percent wet road
- 32 percent night time
- Worst month April, best August
- Worst day of week Friday, best Sunday

Partnerships

Land Transport NZ works closely with many road safety partners at national, regional and local levels. These include government departments, enforcement agencies, territorial local authorities, health authorities and local service providers.

Some of the key road safety partners in the Eastern Bay of Plenty area include:

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